

Moab Tailings Stakeholders Group Meeting

Grand County Council Chambers
125 East Center Street
Moab, Utah
May 29, 2003
9 a.m. to 3 p.m.

Attendance: Dianne Nielson (Utah DEQ); Bill Sinclair (Utah DEQ), Bob O'Brien (Utah DEQ), Loren Morton (Utah DEQ); Tom Anderson, (Stoller/Battelle); Terry Wietz (IUC), Mike Tucker (DOE), John Darke (self), Bruce Waddell (US FWS), Cordell Roy (U.S. NPS), Phil Gardner (University of Utah); Damian Fagan (TNC), ; Kip Solomon (University of Utah), Don Metzler (DOE), Joel Berwick (DOE), Ray Plienness (DOE), Jim Salmon (self), Harvey Merrell (self) Judy Carmichael (Grand County), Allison Heyrend (Congressman Jim Matheson's Office), Joette Langranese, (Grand County), Jerry Banta (U.S. NPS), Toby Wright (Stoller), Dan Kimball (U.S. NPS), Kent Bradford (Westinghouse), Phil Brueck (U.S. NPS), Dave Wood (U.S. NPS), Kim Manwill, Utah DOT), and Rex Tanner (Grand County).

1. Welcome and Introductions

Rex Tanner, Grand County Council
Dianne Nielson, Utah Department of Environmental Quality

2. Department of Energy Update On-Site Status (Joel Berwick, Department of Energy-Grand Junction Office). Handout of presentation slides distributed to attendees.

A. Off-site Tailings Remediation (Highway 191)

- March-April: DOE remediated contaminated soils within Utah Department of Transportation right-of-way and within Department of Energy property boundary.
- 4,200 cubic yards of material excavated and stockpiled on mill site. Stockpile sprayed with dust suppressant; material will be stabilized on top of tailings pile later this year (after purchase of used dump truck).
- Utah Department of Transportation will remediate areas outside Department of Energy property boundary.

B. Dust Suppression – tailings pile and mill site

- Department of Energy planning on two applications annually (spring and fall) of calcium chloride until final remediation begins.
- Spring 2003 application completed April-May. Next year DOE will start earlier in year.

C. Other DOE Activities: Legacy chemical management

- Department of Energy inherited 1,436 bottles of laboratory chemicals and industrial waste products.
- Chemicals were segregated into suspected radiological and non-radiological contaminated categories.
- In February 2003, 561 containers of non-radiologically contaminated chemicals disposed of at an approved temporary storage and disposal facility.
- Remaining inventory has been safely segregated and stored until future disposition. *DEQ will assist DOE as needed to get chemicals safely disposed off-site. In the*

interim, DOE will coordinate with Grand County Fire Department/Hazmat Team to prepare their staff for possible fire risks at mill site.

D. Mill Site Characterization

- Soil samples collected from approximately two-thirds of off-pile areas.
- Sample results will be used to estimate contaminated soil quantities.

E. Repair to tailings pile

- Off-pile soils hauled to top of pile to:
 - Repair erosion rills on side slopes (southeast corner)
 - Add soils where cover is thin (north side)
 - Repair cracks where pile consolidation is occurring

F. Tailings settlement monitoring

- Significant settlement has occurred in slimes area of pile (11 feet maximum, 5-6 feet average).
- Tailings dewatering is continuing with electricity installed to dewatering pump at wick drain collection sump.

3. Department of Energy Update on Environmental Impact Statement Process (Joel Berwick, Department of Energy-Grand Junction Office). Handout of presentation slides distributed to attendees.

A. Summary of Public Scoping Process

- Scoping period: December 20, 2002, through February 14, 2003
- Six public meetings generated 386 comments
 - Green River: January 21, 2003 (12 people)
 - Moab: January 22, 2003 (49 people)
 - Blanding: January 23, 2003 (60 people)
 - Blanding meeting with Navajo Nation: January 23, 2003 (32 people)
 - White Mesa Ute Mountain Tribe: January 23, 2003 (50 people)
 - East Carbon: January 28, 2003 (48 people)
- 175 individuals provided written comments
- 45 individuals provided oral comments via telephone or email.
- EIS consideration of scoping comments
 - Comments have been reviewed by Department of Energy and contractor staff members
 - Comments will be summarized in Draft EIS
 - Complete comment record maintained in project files and in reading rooms in Moab Library, Blanding Library, and White Mesa Tribe (Community Center?).
 - Generation of EIS scope, content, and analyses considers scoping comments.
- Proposed action: remediate the Moab mill site
 - Tailings
 - Contaminated site soils
 - Contaminated ground water
 - Contaminated vicinity properties (currently not funded).

B. Update on Remediation Proposals (IUC, ECDC, Green River, Crescent Junction)

- Surface remediation alternatives

- Cap in place
- Off-site disposal Options
 - Crescent Junction: single purpose site (*Rex Tanner informed the group that the Williams Pipeline Company has proposed a tank farm storage facility in this general area*).
 - Klondike: located near county solid waste landfill
 - White Mesa: co-located with existing mill tailings at a site that will become DOE's responsibility for long-term management
- Tailings transport by truck, rail, and pipeline
- Alternatives dismissed from detailed evaluation
 - Included in the Notice of Intent
 - East Carbon Development Corporation site
 - Excluded before Notice of Intent
 - Green River
 - Box Canyon (seven miles west of Dead Horse turnoff on State Road 313)
 - Rio Algom Mining Corporation
 - Cisco
 - Whipsaw Flats (BLM land immediately north of Arches National Park)
 - Others
- Rationale for site dismissals
 - East Carbon Development Corporation formally withdrew its site
 - Other sites eliminated for the following reasons
 - Insufficient land area
 - Proximity to sensitive environment factors such as floodplains, critical habitats, population
 - Sub-optimal hydrologic setting
 - Failure to add to the range of reasonable alternatives
 - Proximity to transportation (distance)

C. Cooperating Agency Process / Involvement / Schedule

- Regulatory basis: 40 CFR 1503.2
 - Special expertise
 - Jurisdiction by law
- Deliverables cooperating agency specific
- Objective to build a better Draft EIS
- Timely responses needed
- Cooperating agencies: 11 agencies
 - National Park Service
 - Bureau of Land Management
 - U.S. Environmental Protection Agency
 - U.S. Nuclear Regulatory Commission
 - Army Corps of Engineers
 - U.S. Fish and Wildlife Service
 - State of Utah (several offices)
 - Ute Mountain Ute Tribe
 - San Juan County
 - Grand County
 - Community of Bluff
- Nature of Actions

- Reviews for information and comment
 - Threatened or endangered species characterization
 - Ground water compliance strategy
 - Licensing strategy
 - Cultural, historical, archeological resources, and traditional cultural properties
 - Technical analyses
 - View-shed and visual impact analyses
 - Truck traffic impacts (UDOT)
- Schedules
 - Interactions very successful to date
 - EIS preparation concurrent with agency reviews
 - Agency review periods maximum that can be accommodated
 - EIS cannot wait for delayed responses, DEIS schedule is first priority.

D. EIS Completion Schedule (DOE will provide amended Memoranda of Agreement to Cooperators to reflect the new review schedule).

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|----------------------------|-----------------------|
| ▪ Notice of Intent | December 2002 |
| ▪ Scoping | January-February 2003 |
| ▪ Draft EIS Publication | January 2004 |
| ▪ Draft EIS Comment Period | January-February 2004 |
| ▪ Final EIS Publication | August 2004 |
| ▪ Record of Decision | September 2004 |

4. **Groundwater Subcommittee Report** (Dan Kimball, National Park Service/Don Metzler, Department of Energy-Grand Junction Office). Handout of presentation slides distributed to attendees.

A. Summary of Recent Studies (since March 2002)

- River migration
 - Objective
 - Evaluate potential for river migration to impact Moab site stability
 - Evaluated
 - Morphology and stability of current channel
 - Historical evidence of river migration (1800 to current)
 - Morphology of basin-fill sediments
 - Rate of regional salt dissolution
 - Results of recent field investigations
 - DOE Conclusions
 - Based on current river morphology, existing river channel is moderately-stable to stable
 - Rapid (catastrophic) channel migration very unlikely
 - Based on salt dissolution rates and distribution of basin-fill sediments, gradual migration of river into the tailings over the 1,000 years very unlikely.

During this discussion, DOE was met with a significant amount of disagreement with respect to its conclusions. In an attempt to resolve this disagreement, the Ground Water Subcommittee was asked to hold further discussions on the probability of river migration into the tailings pile and report back to the Stakeholders. The subcommittee was also asked to examine again the DOE assumptions and technical

justifications. Topic was placed in “parking lot” to discuss later in the agenda (See item 7b).

- Ground water vertical hydraulic gradients/implications for Scott Matheson Wetlands Preserve

- DOE Premise: there is not an obvious potential for contaminated groundwater to travel under the river to the Matheson Marsh.

A significant amount of disagreement was found on this conclusion. Ammonia was detected in monitoring wells in the Matheson Marsh, but unable to determine if it came from septic tank drainfields for hotels along east margin of marsh or Atlas. This is still under consideration. Don't have enough data to make a conclusion. Moab City POTW is not the source in that its wastewater outfall is piped directly to the river.

Kip Solomon provided his findings from recent hydrogeologic studies at the Matheson Marsh, as follows:

- 1) Deep groundwater flow is upwards; shallow flow is downwards, converging in gravel channels found at a depth of about 30-feet;*
- 2) These gravels could be significant conduits for transmission of groundwater pollution from Atlas site.*
- 3) Downward, neutral, and upward hydraulic gradients have been found on the DOE side of the river, which suggest that the river is not the regional sink for groundwater that it was once thought to be.*
- 4) Water rights and wells exist in the wetlands that are screened in shallow river gravels. These withdrawals are used for irrigation and habitat maintenance for the Matheson Preserve, and need to be protected.*

- Tailings seepage predictions

- Objective
 - To estimate present and potential future seepage rates
- Evaluated
 - Past studies (SRK 2000; SMI 2000; ORNL 1998; Armstrong et al. 1998; DOE studies 2002)
 - Gravity drainage
 - Consolidation drainage
- DOE Conclusions
 - Current total seepage from tailings estimated to be approximately 20 gallons per minute (gal/min).
 - Total seepage estimated to decrease to approximately 1 gal/min during next 15 years (after construction of a radon barrier and cover system).
 - Long-term flux limited by final cover (*1-D seepage model predictions*)
 - ✓ 0.8 gal/min if cover saturated permeability is $1.0\text{E-}8$ cm/sec.
 - ✓ 8.0 gal/min if cover saturated permeability is $1.0\text{E-}7$ cm/sec.

Two types of seepage occurring: gravity drainage and consolidation drainage, both combine together to form a total discharge of about 20 gallons per minute (currently). In the past, it used to be more than that. With time, the discharge will decrease. In 15 to 20 years, it should decrease to about 8 gallons per minute. If it was capped in place ($1.0\text{E-}8$ cm/sec radon barrier), seepage would less than one gallon per day in about 15 years.

- Subpile soil characterization
 - Objective
 - Characterize subpile soils concentrations and evaluate potential as future pollution source to ground water.
 - Evaluated
 - Data from SRK, ORNL, SMI, and DOE studies
 - Others: 9 borings (all through pile)
 - DOE: 4 borings (3 through pile, 1 background)
 - Total: 42 soil samples (4 background, 38 subpile)
 - Conclusions
 - Contaminants seeping from tailings have loaded subpile soils
 - Most contaminants decrease to background concentration in subpile soils within 10 feet of bottom of tailings, well above the water table.
 - If remediated to meet radium-226 standards, likely to be protective from other nonradiological constituents.

In general, depth to base of soil contamination is below the base of the tailings but above the ground water table. However, exceptions were found, e.g., ammonia contamination extended to depths of about 40 feet below the base of the tailings (about 15-25 feet below water table) at two locations under the pile. Effect of this residual ammonia contamination on groundwater remediation will need further study. Subpile soils are fine grain sands to a depth of about 30 feet. Below that, they are more coarser grained (gravel and cobbles).

B. Summary of Most Recent DOE Studies / Activities (since February 2003)

- Status of Moab site conceptual model
 - Complex two-phase system
 - Freshwater system overlies salty “brine” system
 - Freshwater system discharges to Colorado River (down to a depth of about 30-40 feet below the water table).
 - Brine system relatively stagnant, loads freshwater system through diffusion and mixing
 - Tailings historically contaminated both brine and freshwater system
 - Freshwater system and brine system both discharge to Colorado River (brine system discharge is low compared to freshwater system)
 - Freshwater recharge primarily from Glen Canyon Group bedrock; minor amount from Moab Wash area.
 - Total ground water flow through freshwater system is approximately 400 gal/min.
 - Limited freshwater on east side of river (Scott Matheson Wetlands Preserve); brine much more shallow

If DOE’s conceptual model for the aquifers is well defined, then we can proceed to computer modeling. This is the foundation on which we build. Must understand groundwater flow system fully; especially the groundwater – surface water relationship. Most of the tailings contaminants found in the fresh water system discharge to the river. *Due to funding and schedule limitations, DOE will not perform any more studies for this purpose before issuance of the Draft EIS.*

- Groundwater modeling update
 - Using several accepted ground water computer models
 - Making predictions about how the tailings may impact the ground water and the river
 - Models based on site-specific characterization data and site conceptual model.
 - Model parameter optimization currently in process (e.g., estimates of river seepage to shallow aquifer upstream of pile).
 - Predictive runs currently in progress.

The biggest goal of groundwater at this site is too be protective over the long term. In one month, DOE will be able to predict long-term (200 to 1,000 year) scenarios. Groundwater cleanup costs and time of cleanup estimates will be forecast for both relocating the pile and stabilization in place options.

- Interim ground water remediation action (status and schedule)
 - Lined pond on top of tailings impoundment (~ 3.8 acres, depth less than 10-feet).
 - 10 extraction wells in shallow alluvial aquifer
 - Annual average pumping rate of approximately 30 gal/min
 - Scheduled to be complete/operational by September 30, 2003
 - To minimize winter storage, DOE will use some of the pumped groundwater for dust control on top of the tailings pile.
- Status of initial ground water action (backwater flushing)
 - Design
 - Pump river water from above Moab Wash; apply to backwater areas to provide short-term dilution
 - 2002
 - Backwater areas did not develop due to low river flows
 - No action taken; developed letter report summarizing river flow conditions
 - 2003
 - Will observe river conditions

Did not get funded this fiscal year (\$50,000-70,000). Funding has been allocated for maintenance of site and the EIS. Some of the infrastructure is in place.

C. Need for Additional Groundwater / Surface Water Studies (including schedules)

- DOE will not conduct additional studies prior to issuing final EIS.

Several present expressed dismay that DOE would not conduct additional studies to better define groundwater – surface water relationships at the site. With the exception of DOE staff, most people present felt additional work is needed to evaluate the potential for contaminated groundwater from the former Atlas facility to travel under the river. Additional piezometers are needed both at shallow intervals on the DOE side of the river, as well as deeper piezometers on the Matheson Preserve side (to compliment the existing University of Utah piezometers). Isotopic and geochemical groundwater studies are also needed.

One attendee suggested the DOE consider asbestos sampling of groundwater at the selected wells on the DOE property.

D. Ground Water Contaminants and Risk

- Major constituents of potential concern: ammonia, arsenic, molybdenum, nitrate, uranium, and vanadium
- Summary of risks from ground water
 - Ground water is currently not used (no direct risks to human health are occurring)
 - Future use of ground water as a source of drinking water would result in unacceptable risks
 - Ground water that enters Colorado River
 - Causes minimal risk impacts to recreational users
 - May result in unacceptable risks to ecological receptors in backwater areas adjacent to the site, particularly ammonia.

E. EPA Ground Water Standards

- Objectives
 - Compliance with ground water quality standards (EPA regulation at 40 CFR 192)
 - Protective of human health and environment (40 CFR 192)
 - State surface water and ground water standards are “to be considered”
 - Compliance with standards will follow process in *Uranium Mill Tailings Remedial Action Ground Water Project Programmatic Environmental Impact Statement*
 - Long-term protection of ground water
 - Minimize long-term seepage from disposal cell
 - Compliance strategy selection process
 - *DOE Groundwater Programmatic Environmental Impact Statement*
 - No further remedial action
 - Natural flushing with monitoring and institutional controls
 - Active engineered treatment
 - Some combination depending on contaminant

5. Relocation Subcommittee Report – Transportation Modes/Cost Evaluation (Bob O’Brien, UDEQ and John Elmer, Stoeller) Subcommittee Chair: Bill Hedden (excused).

The subcommittee met three times during the past year. Minutes of these meetings are posted on Utah Division of Radiation Control web site. DOE provided handouts which are summarized below.

▪ Possible Off-site Disposal Transportation Modes

Disposal Site	Rail	Truck	Slurry Pipeline
Klondike	Yes	Yes	Yes
Crescent Junction	Yes	Yes	Yes
White Mesa	NO	Yes	Yes

- Off-site disposal transportation modes
 - Tailings rail haul – currently, the Potash rail spur has only 1 train /week of rail traffic, which could be easily managed with the proposed tailings rail traffic.

Schedule	Method (30 cars)	Total Round Trips (per day)	Duration (years)
12-hour shift / 6-day week	Gondolas	4	3.3
	Containers	4	3.9
2 10-hour shifts / 6-day week	Gondolas	8	1.6
	Containers	8	2.0

- Tailings truck haul – requires construction of 2 temporary overpasses with merge lanes on Highway 191 (one at each end). Under this scenario, truck traffic on Highway 191 would increase by 20%, from about 13% now to 33-34%. Increased truck traffic will more rapidly degrade the pavement surface, forcing UDOT to re-construct the highway before it currently projected lifespan. This cost to the State needs to be factored into the total cost for this scenario. Need to consider impacts of truck traffic on local tourism during life of project.

Work Shift	Round Trips (per day)		Frequency (minutes)		Duration (years)	
	Max.	Min.	Max.	Min.	Max.	Min.
12-hour shift / 7-day week	384	220	2	3	3.5	2.0
2 20-hour shifts / 7-day week	624	396	2	3	2.0	1.3

- Tailings slurry pipeline
 - 24-hour day, 7-week
 - 2 pipelines, 1 slurry, 1 return water - 12- to 14-inch diameter each.
 - Return water loop (80% of water returned through loop)
 - Approximately 400 gallons per minute makeup water (water sources = Recapture Reservoir, Colorado River, DOE site contaminated groundwater, IUC Navajo Sandstone water supply wells).
 - Approximately 400 tons of slurry transported per hour (55-60% solids)
 - Less than 3.5 years to complete move of tailings
 - 2 slurry pumping stations – 1 at site, 1 near La Sal Junction
 - 170,000 yd³ of structural debris will still need to be trucked.
 - Need to de-water slurry, which could be problematic during cold seasons.
 - Prior NRC license amendment needed for the White Mesa site.
 - Uncertainty exists on securing Rights-of-Way for pipelines.

■ Maximum trips per day for borrow material

Borrow Material Source Location	Cap-in-Place		Klondike		Crescent Junction		White Mesa Mill	
	Work Shifts		Work Shifts		Work Shifts		Work Shifts	
	1	2	1	2	1	2	1	2
Cover Soils Floy Wash Crescent Junction Klondike Ten Mile Courthouse Incline Blue Hills Road	34	67	54	86	On Site	On Site	On Site	On Site
Radon Barrier Soils Crescent Junction Klondike	16	32	On Site	On Site	On Site	On Site	On Site	On Site

Sand and Gravel	6	13	9	15	9	15	On Site	On Site
Riprap Lisbon Valley Grand Mesa/Paonia Blanding	11	22	3	6	3	6	3	6

- Mill site restoration top soil truck haul

Alternative	Trucks Per Day	1-Year Duration
Cap-in-Place	23	Concurrent with borrow material delivery
Off-site Disposal	33	Following mill site cleanup

A. Klondike Flat Option – rail haul, truck, slurry pipeline

- For rail haul: Quantity: 12 to 13 million tons; 8,000 tons per day, 6 days per week, 52 weeks a year; would take 5 years to relocate; cost estimation: \$250 – \$300 million. Utah Railways to have access to Union Pacific lines; the pricing is trickier
- For truck haul: Would use highway 191; 2 temporary overpasses or merge lanes, 150 round trips per day (would increase truck traffic 20 percent), 40 tons per day, five days a week, 52 weeks a year; 8 years to relocate; cost estimation: \$220-\$270 million
- For slurry pipeline: IUC proposed a line to their facility 90 miles south of Moab; 2-line system (going and returning); 12-inche pipeline, would carry 55-60% solids; two pumping stations; could use some rights of way, would have to get other rights of way; 80% of the water used to move the slurry will be recycled; 170,000 tons of pile material would not be able to go through slurry pipeline, it would have to go somewhere else; cost estimation pending; would take 2 years to move material to IUC.

Slurry line could also be applied to Klondike and Crescent Junction sites.

John Darke suggested this committee take a look at license modification at White Mesa. Is it within regulatory framework?

Joette Langranese asked which transportation mode poses the least risk to the community. Answer: The rail mode.

B. White Mesa Option – slurry pipeline

C. Alternative Sites and Transportation Modes Eliminated

- Mine Haul Trucks: three options considered:
 - Mine Trucks on Existing Rail Bed
 - Mine Trucks on Highway 191 Shoulder (during upcoming construction)
 - Mine Trucks on Old County Road.

It was determined that mine haul trucks are not road or rail bed legal. They are very large and heavy (~ 100 tons). Both old county road and rail bed would have to be widened, and improved to bear loads expected. Cost for these improvements expected to be very high. No room for rail bed expansion at “pinch” point west of Arches Headquarters. Also, mine truck traffic on Highway 191 during up coming

construction deemed very hazardous for passenger vehicle traffic – dust control would be a problem, and collision risk is high.

- Conveyor system eliminated. Too costly. 48-inch “open” conveyor construction would cost \$62 million. Tube conveyor, 36 inches, would cost \$114 million alone to construct. Costs did not include operation and maintenance for the duration of the project, which would also be high. Conveyors appear technically doable, but not economically feasible.
- Envirocare – long haul distance makes it economically infeasible.
- East carbon development – opted out

D. Other Sites - have come up

- Green River – been removed from list
- Crescent Junction – being considered as an alternative site; Grand County sees Crescent Junction as a potential tank farm development site for the Williams pipeline company.

Rex Tanner asked if the Moab site is a secured facility? Answer: Moab Tailings site is manned by DOE staff for four days a week; it is fenced; and buildings are locked; Other than that, it is not a secure site.

More details of these sites will be addressed in the EIS.

6. Atlas Employees Records Update (Bill Sinclair, Utah DEQ)

A. Additional Records from Atlas Corporation - DEQ is the repository of employee records. DEQ is in the process of receiving the records; some are in Denver. DEQ Human Resources has gone through 115 boxes of records. There are 1,500 files of individual employee records. These records are part of verification of employment, necessary for Radiation Exposure Compensation Act. There are very few records before 1965. For last 10 months, 25 individuals have requested their records. If you know someone who would like to apply for Radiation Exposure Compensation file or who needs those records for verification of employment, contact DEQ HRM.

B. Additional Records from DOE-GJO – have been received by DEQ.

7. Stakeholders/Cooperating Agencies/DOE Environmental Impact Statement Process
(general discussion)

A. Problems with EIS Process and Timeliness

- Draft EIS to cooperating agencies by Oct. 2003; agencies have 21 days to review it; goes to public by Jan. 2004 for public comment period
- Timeframes are short. DOE is under pressure to meet dates; please make every effort to meet EIS deadlines.
- June 25, 2003 is the release of the ground water compliance strategy for cap in place, relocate, and ground water remediation.
- It will be a challenge to meet deadlines (because of workload) and provide quality comments under time constraints.

John Darke requested that DOE go to Headquarters and let them know that 21 days is not enough time for review of the EIS. Public reaction or uprising during the implementation of the plan might happen and may be expensive. He wants more time for the EIS. His main concern is the site documents.

Department of Energy: If we thought additional data would change our decision or the outcome, we would go to Headquarters and ask for more time. The timeline for EIS hopefully provides a comfort line. General public wants a decision and is expecting agencies to meet decision deadlines. Public has opportunity to provide comment during the comment period. DOE will come to a good decision within the timeline.

Dianne Nielson: Agencies will have two opportunities to make comments -- once in October, and then again in January when the EIS goes out for public comment.

B. Future Role of Groundwater Subcommittee

- Dianne Nielson asked if there's a way this committee can help with workload. Dan Kimball suggested that the subcommittee focus on river migration and surface water/ground water interaction.
- River Migration: subcommittee to review details of DOE's analysis to see what has and has not been considered. DOE to provide "calc set" to subcommittee after DOE receives feedback from the Army Corp of Engineers. Dan Kimball then will set up meeting with subcommittee. Subcommittee will tell Dianne Nielson if they need to inform stakeholder group at next meeting or have the stakeholder group help them work through issues. Army Corps of Engineers will be included in the subcommittee.
- Surface water/ground water interaction: subcommittee asked DOE to conduct additional studies during its February, 2003 meeting. DOE has not and will not undertake any additional groundwater/surface water studies due to a lack of funding and time. However, failure scenarios are being looked at by DOE in the EIS process. What if the data and conclusions were wrong and the decision ended up having a negative impact?

Dianne Nielson: we will make a determination if critical information is there or not, and, if not, critical information can be addressed in time to make sure decision/solution can be identified in EIS. If the information is not available to answer critical technical questions, then the State and other Cooperating Agencies will be forced to assume the worst-case scenario will happen, and that will then form the basis for remedial action.

Dan Kimball: Stakeholder group may also want to consider funding the Initial Action, if river conditions are right and if there's some trust money available. Committee could help with this initial action.

Dianne Nielson: Trust money held by state is an interest-bearing account. Money has not been used to date. The funds have been held in case of an emergency. This money is a possibility.

C. Future Role of Relocation Subcommittee

- Participating agencies need information in advance of drafts, not necessarily to the subcommittee, so that the draft EIS is less of a surprise. It was suggested that information be provided as it develops rather than waiting and packaging it in a formal document.

- Subcommittee is not going to meet again unless something develops and the need is there to meet.
- Tailings pile relocation issues can be worked through DOE – Cooperator Agency interactions during the EIS process.

8. **Site Funding Needs** (general discussion)

- Dianne Nielson: Two million in president's budget for FY04 covers ongoing maintenance and EIS process. Congressman Matheson has asked for \$6 to \$7 million.
- Dianne Nielson: State has identified other funding issues:
 - Operation and maintenance of ground water pump and treat system
 - Study contamination under the river regarding ground water/surface water interaction
 - Sites stabilization projects
 - Initiate site remedial design
- Congressional support is unknown; Southern California Metro Water District supports these identified needs.
- As soon as funding information becomes available, stakeholder group will be informed.

9. **Other Issues** (general discussion)

Next meeting at Grand County Council room in Moab

November 20, 2003, 9 a.m. to 3 p.m.

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